

1/23

Name: IMX4

CCGGTAAGTAAACAGTCAGAAAATTAGCATGAAAGCASTTTAGCATTGGGAGGAAGCACA
GATCTCTAGAGCTGTCCTGTCGCTGCCCAGGATTGACCTGTGTGTAAGTCCCAATAAACT
CACCTACTCACCAAAAA

FIGURE 1

2/23

Name: IMX 10

GAATTTAATACGACTCACTATAGGGAATTTGGCCCTCGAGGCCAAGAATTCCGGCAGGAGG
CAACAACAACAACAAAAAAACTGAACATCTCCATATTACTGACACCCAATTCAAGAAA
CAAAATATTACAGCCCCTTCCAGGATATTCTTGGGGTCTCTTCCATCTCTACTAACCCTT
GACTACAAACAGCCTCCACCTATTTACCTGACATTGTACTTTATGAAAGCAGCAGTTCT
CAGATGGGGCTATTTTGGCCCCCTGGGGACATTAGGGAGTATCTGGAGACACTGAGGGTTG
TGTCTACTTGGGGGGAGTTGTGTTACTGCATCCAGTGAGTCCAGGGATCCAGGGATGCCG
CTCAACATCCTGAAATGCACAGGGAACCCCCACACATAGAACAGAGAAATTGCTGAGCCA
AAATGTCAGCAGTGTCACAGCTGACACCCTGATATACACACTATCACACAGTATCTGCTC
TTTCGGGCTCAGGATCTTTTTTCAATTCTAATCATCTCATAGGAAACAGAAATGTCATTTAG
AGGTAGGTACAGTCCACAACAAAGAAGAACCTGAGTTTTTTTTTTTTTTTTTAAATCAGCCT
GGTGCCTTTAGAGCTAGGATTTAGTTTCTATTCTTTCTGTCTCATTTTTCAAGTGATTTT
TTCTTCAAATGGCATCTACTGGGCTCAAGAACTGGAGATCCCCACAAAGCTGAGATTCAC
ATGGGAATTTTGTACACACCCACACAGGTATACACTTCCATTTACATGCAGACATCCACC
CACAGATACACACATCCGGAGACCAAGACAGAACGCAAACCTGCCCCATAAAAGCAGGTT
CCCCAAACAGGAGAAACGCACCATTCACTCCAGGGAGGTATCTATTTGTTTAATTCAGCC
TCTGATAGTCAGGCTGTTGCCAAGCCCAGCTCTGAAACTCTTCCCCTCTAGGAAAGAAAG
ATGGATTTTTTCTTTACTCAAGAATATAGATCTAAAAAAAAAAAAAAGTTGGCGG
CCGCAAGCTTATCCCTTTAGTGA

FIGURE 2

3/23

Name: IMX 21

GGTACCGGGCCCCCCTCGAGGTGACGGTATCGATAAGCTTGATATCGAATTGCGGGCC
GCTGAGAAATTAACCTCCCCGGGGCCCGGGTTGACTGCGCTGCCCTGGGCCGGAGGTCTT
CTCCGGCCAGGGAGCCTGTGGGAAGGGGCTCGAGCGGCCAGGGCCAGGCGAGGGCCGGGG
GGGCGGGGGGTTAGGGGACCGCGGGGCTACTCTTGGGAGCGCCCCCTGTCCGGCTGGCTGC
GCGCCGGTTTTTAAATAGCATCTTTCGGACTTGTCTTCGCGGCCCCAGTCCCCGACCTCGG
CGCTGCCCTGGGCTCCTGCAGCCTCTCCCTAAGTCTTCTCCAAACGACCACCTCACGGATT
CCTTATGGATCGCAGCTCCAAGAGGAGGCAGGTGAAGCCTTTGGCAGCTTCTCTGCTGGA
AGCTCTTGATTATGATAGTTCAGATGACAGTGATTTTAAAGTTGGAGATGCCTCAGGACT
CGCTGATTCTTGAGAAGAGTCAAACTGGAGCTCTCAAAAATGGACCATATTCTGATTT
GCTGTGTTTTGTCTGGGAGATAATAGTGAGGACGCTGATGAAATAATTCAGTGTGACAATT
GTGGCATTACAGTCCATGAAGGTTGTTATGGAGTTGATGGAGAGAGTGACTCTATTATGA
GTTCAAGCTTCTGAAAACCTCACTGAACCTTGGTTTTGTGATGCCTGTAAATGTGGTGT
CTCCTAGCTGTGAACCTGTCTCTAATCAGGATGGAATTTTCAAGGAGACAGATGCTGGAA
GATGGSTTCATATTSTTTGTGCCCTGTATGTTCTTGAGTAGCCTTTGGAGATATTGACA
AATTACGACCAGTAACACTAACGGAAATGAACTATTCCAAATATGGTGCCAAGGAGTGTA
GCTTTTGTGAAGACCCTCGCTTTGCTAGAACTGGGGTTTTGCATTAGCTGTGATGCAGGGA
TGTGCAGAGCCTATTTCCATGTGACCTGTGCTCAAAAGGAAGGTCTGCTTTCAGAGGCAG
CGGCGGAAGAGGATATAGCAGATCCATTCTTTGCTTATTGTAAAGCAACATGCAGATAGGT
TAGACAGAAAGTGGAAGAGAAAAAACTACTTGGCTCTACAGTCCATTGTAAATGTCTT
TGCAAGAGAGAGAGAAGCAACTATCACCAGAAGCACAGGCAAGGATCAATGCCCGGCTTC
AGCAGTATCGTGCCAAAGCAGAACTAGCTCGATCTACCAGACCCAGGCCTGGGTCCAA
GGGAAAAATTGCCAGACCACTCACCAGCAGTGCTTCAGCTATTCGTAAACTTATGCGGA
AAGCAGAACTCATGGGGATCAGTACAGATATCTTCCAGTGGACAATTTCAGATACTAGTT
CTAGTGTGGATGGAAGGAGAAAACATAAGCAACCAGCTCTCACTGCAGATTTTGTGAATT
ATTATTTTGAGAGAAATATGCGCATGATTCAAATTCAGGAAATATGGCTGAACAAAAGA
ATATAAAAGATAAATTAGAGAATGAACAAGAAAAGCTTCATGTAGAATATAATAAGCTAT
GTGAATCTTTAGAGAACTACAAAACCTGAATGGAAAACCTCGAAGTGAAGGACAAAGAA
TATGGGCTTTACTAGGCAGAATCACAGGGCAGAAAGTTGAATATACCGGCAATTTTGGCAG
CACCCAAGGAGAGAAAACCAAGTAAAAAAGAAGGAGGCACACAAAAGACATCTACTCTTC
CTGCACTACTTTATAGTTGTGGGATTTGTAAAGAAGAACCATGATCAGCATCTTCTTTTAT
TGTGTGATACCTGTAAACTACATTACCATCTTGGATGTCTGGATCCTCCTCTTACAAGGA
TGCCAAGAAAGACCAAAAACAGTTATTGGCAGTGCTCGGAATGTGACCAGGCAGGGAGCA
GTGACATGGAAGCAGATATGGCCATGGAAACCTACCAGATGGAACCAACGATCAAGGA
GGCAGATTAAGGAACAGTGAAATTTGTTCCACAGGATGTGCCACCAGAACCCAAAGAA
TTCCGATAAGAAACACGAGAACCAGAGGACGAAAACGAAGCTTCGTTCCCTGAGGAAGAAA
AACATGAGGAAGAGTTCTAGAGAGAGAAGACAAAGACAGTCTGTGTTGCAAAAGAAAGC
CCAAGGCTGAAGATTTAAGAACTGAATGTGCAACTTGCAAGGGAAGTGGAGACAATGAA
ATCTTGTGAGGTGTGATGAATGCAGACTCTGCTACCATTTTGGCTGTTTGGATCCTCCTT
TGAAAAAGTCTCTAAACAGACAGGCTACGGATGGATATGTCAAGGAATGTGATTCTTCAT
CTTCCAAGGAAGATGAAAATGAAGCTGAAAGAAAAAATATATCTCAGGAGCTCAACATGG
AACAGAAAAATCCAAAGAAATAAAAGATTTTCTGTAGTGTTTTTGAAAAGTTTGCAGCTT
ATGTAATAGCAGATAAAATTTCTAATTGTAAATGTTAAATTGAGCGGGCCGCGAATTCCT
GCAGCCCCGGGGATCCACTAGTTCTAGAGCGGGCCGCCACCGGGTGGAGCTCCAGCT

FIGURE 3

4/23

Name: IMX 28

ATTAAACCCTCACTAAAGGGAACAAAAGCTGGAGCTCCACCGCGGTGGCGGCGGCTCTAGA
ACTAGTGGATCCCCCGGGCTGCAGGAATTCGGCACGAGGTGCGCGGCTGCAACGGCAGCC
GCGGGAAGCTCGGGCCGGCAGGGTTTCCCCGCACGCTGGCGCCAGCTCCCCGGCGGGAG
GCCGCTGTAAGTTTCGCTTTCCATTTCAGTGGAAAACGAAAGCTGGGCGGGGTGCCACGAG
CGCGGGGGCCAGACCAAGGCGGGGCCCGGAGCGGAACTTCGGTCCCAGCTCGGTCCCCGGCT
CAGTCCCCGACGTGGAACCTCAGCAGCGGAGGCTGGACGCTTGCATGGCGCTTGAGAGATT
CATCGTGCCTGGCTCACATAAGCGCTTCCTGGAAGTGAAGTCGTGCTGTCTGAACGCGG
GCCAGGCAGCTGCGGCCTGGGGGTTTTGGAGTGATCACGAATGAGCAAGGCGTTTTGGGCT
CCTGAGGCAAATCTGTTCAGTCCATCCTGGCTGAGTCTCGCAGTCCCCGGCAGATCTTGA
AGAAAAGAAGGAAGAAGACAGCAACATGAAGAGAGAGCAGCCCAGAGAGCGTCCCAGGGC
CTGGGACTACCCTCATGGCCTGGTTGGTTTACACAACATTGGACAGACCTGCTGCCTTAA
CTCCTTGATTTCAGGTGTTTCGTAATGAATGTGGACTTCACCAGGATATTGAAGAGGATC
GGTGCCCGAGGGGAGCTGACGAGCAGAGGAGAAGCGTCCCTTTCCAGATGCTTCTGCTGCT
GGAGAAGATGCAGGACAGCCGGCAGAAAGCAGTGCGGGCCCTGGAGCTGGCCTACTGCCT
GCAGAAGTGCAACGTGCCCTTGTTTTGTCCAACATGATGCTGCCCAACTGTACCTCAAAC
CTGGAACCTGATTAAGGACCAGATCACTGATGTGCACTTGGTGGAGAGACTGCAGGCCCT
GTATATGATCCGGGTGAAGGACTCCTTGATTTGCGTTGACTGTGCCATGGAGAGTAGCAG
AAACAGCAGCATGCTCACCCCTCCCCTTTCTCTTTTGGATGTGGACTCAAAGCCCCCTGAA
GACACTGGAGGACGCCCTGCACTGCTTCTTCCAGCCCAGGGAGTTATCAAGCAAAGCAA
GTGCTTCTGTGAGAACTGTGGGAAGAAGACCCGTGGGAAACAGGTCTTGAAGCTGACCCA
TTTGCCCCAGACCCTGACAATCCACCTCATGCGATTCTCCATCAGGAATTCACAGACGAG
AAAGATCTGCCACTCCCTGTACTTCCCCCAGAGCTTGGATTTTCAGCCAGATCCTTCCAA
GAAGCGAGAGTCTTGTGATGCTGAGGAGCAGTCTGGAGGGCAGTATGAGCTTTTTGCTGT
GATTGCGCACGTGGGAATGGCAGACTCCGGTCATTACTGTGTCTACATCCGGAATGCTGT
GGATGGAAAATGGTTCTGCTTCAATGACTCCAATATTTGCTTGGTGTCTGGGAAGACAT
CCAGTGTACCTACGGAAATCCTAACTACCACTGGCAGGAAACTGCATATCTTCTGGTTTA
CATGAAGATGGAGTGCTAATGGAAATGCCCAAACCTTCAGAGATTGACACGCTGTCATT
TTCCATTTCCGTTCTTGGATCTACGGAGTCTTCTAAGAGATTTTGCAATGAGGAGAAGCA
TTGTTTTCAAACCTATATAACTGAGCCTTATTTATAATTAGGGATATTATCAAAATATGTA
ACCATGAGGCCCCCTCAGGTCTTGATCAGTCAGAATGGATGCTTTCACCAGCAGACCCGGC
CATGTGGCTGCTCGGTCTTGGGTGCTCGCTGCTGTGCAAGACATTAGCCCTTTAGTTATG
AGCCTGTGGGAACTTCAGGGGTTCCCACTGGGGAGAGCAGTGGCASTGGGAGGCATCTGG
GGGCCAAAGGTTCAGTGGCAGGGGTATTTTCAGTATTATACAACTGCTGTGACCAGACTTG
TATACTGGCTGAATATCAGTGCTGTTTTGTAATTTTCACTTTGAGAACCAACATTAATTC
CATATGAAAAAAAAAAAAAAAAAAAA

FIGURE 4

5/23

Name: IMX 32

GCGGCCGCTCTAGAACTAGTGGATCCCCCGGGCTGCAGGAATTGCGGGCCGCTAAATGAA
CTCCCATAAGAGTCTAGACACCATAGAACTCATACCAGGAATCACAAAGTCTCTAAATTT
CCAAAGTTAACTGGAAATATTACAAACTGCAGAATAATTCCAGGCCAAAATATGTTAAAT
TCATAACATGATGTATATCAAAGGAAAAAAGGACATGTGGAAATGACACATTATCTTCAG
TGTATAAAATATTCATTTATGTGAAGTTTCTTGGAAAGGCTACACTACTATTACTGGTTT
CCGTCTGATGTTTGAGATCTGTTGATTTTATGCTTTTCTTACAGGCCTTTCATTATGATC
TTTGGGAAGGAATCAATAAAATGATAGGGCCTACTTCATTAGGTGTGGTTCATTCTATT
CATGCTCCCTGGAAGAACAAGAATGCTGAATTTTGAAATTTAATATTGTATGAATTAGCA
TCAGGGAGAGGTGGAGAAAAATACAAACTAAAAGTCATGCTTATTGTGTTTCAGTGTGCC
CTTCTCCAGAGGGCCACTGGCTTATAGGAAAGGATTGCTGCTCTACCAGTTGACCAGGAG
ATGGCACGCCAGGACATTAAGACACTGGAGTTTTGTTTTCGTTTTTTTTTTTTTTTGGAG
ATGGAGTCTCGCTCTCTTGACAGGCAGGAGTACAGTGGTGCGATCTCGGCTCACTGCAAA
CTCCGCCTCCCGGGTTCAAGTGATTCTCCTGCCTCGGCCTCCCGAGTAGCTGGGACTACA
GGCGTGTGCCACCACCCCGAGCTAACTTTTGTATTTTGTAGTAGAGACAGGGTTTCACCAT
GTTGGCCAGGATGGTCTCAATCTCTTGACCTCATGATCCGCCCCGCTCCGCCTTCCAAAG
TGCTGGGATTACAGGCGTGAGCCAGTGTGCCCGGCCGACACTGGGCTTTTTATGAGAGTG
ACAGATTACTAGGACCTCATTATGTGGTAGAAGTAATGTAGGGGAAATGGCGATTATCTT
TTTTTAAAAGCAATAGCTGTTGTATATCAATGATAAATGAAAAATTAGTTATTCTTGTA
ATTGAAGAAAGAATGGTTATCATAGAGGGTAGTTCAAGTAAAAGAACCAGGGCTGGGTGT
GGTGGCTCACGTTCTGTAATCCCTGTACTTTGGGAGGCCAAGGCAGATGGATCTCTTGAG
GCCAGGAGTTCGAGACCAGCCTGACCAACATGGCAAACCGTGTCTACAAAAAATACA
AAAATTAGCCGGACATCGTGGTAGATGCCTGTAGTCTCAGATATTCAGGAGACCGAGGGG
AAAATCACTTGAACCCGGGGGACGGAGGTTGCAGTGAGCTGAGATCGCACCCTGCTCGC
CAGCCTGGGCAACAGAGTGAGACTCTGCCTCAAAAAAAACCACCAACCAAGAAC
AGAATAGCATGTGCACATATACACAGACGTTTCACAACTGGCATTTATGTTTTGCTACTGT
TTTATTTACAATGTATCACAAGTTTTATGCTTTAATAAAATTTAATCATAACTTCAAAA
AAAAAAAAAAAAAAAAAGCGGCCGCGAATT

FIGURE 5

6/23

Name: IMX 39

GAATTTCGGCACGAGGAAAACATTTGCCCTTGCAGAAGATCACCTTAGTTCTTCCTCGG
AAGAGTATCAGAAGGTCTGGAACCTCTTTAACCGCACGCTGCCTTTCTACTTTGTTT CAGA
AGATTGAGCGAGTACAGAACCTGGCCCTCTGGGAAGTCTACCAAGTGGTGCGTTGGGGGCTC
GCTCTTGGTGGGCTGGTGACTCTGTCCCTTCACACCACTGGCTGGTTGCCACATGTGCC
CGGGTTTCCAGGAAAAGCAGAGCGGCAGTTAGGGCTGCCATGTGCTGGGAGCTGTGTGTC
TGCTCTCCTTCGTCCGCTCCCCAGGGCAGTGTGGTAGCACATCCCATTGTAGAGATGAG
GGCACCGAGGCTTCCTGGAGCATAACCACCTGGTCCCGTTTATGAGTGGTGGCAAAGCTAG
CACTCTCACTTGTCCATTCTGCCTTCCTGGAGACCAGTGGGATGGGTGAGTACAGCCAC
CACACCATTAGCCCCAGGAACATAAGGCTGTGGCTAGACAGCAGGGGTCTCAGGTTTATA
CATGAGGACTGGCTTGTCTTGTAGCACCCACTCACCTGTCTATGTGGGGAGGAATCCTAC
AATAGGTCACCATGGCAGGCTGGGTCTTGTGCTGACCTGTCCCAGATGGGGTTGGGGTAGT
GTAATGTGTACTCTGTGCACAGTGATGAAGTCTGGGAATGGGAGAGGGGAGAAGGATGGG
CACCCACTGACCAGCAGCCTGAAAATTCTACAGCATCCCAGGGCTCAGCTCCATGCAGG
AGCAAGGTGGGGGTGGGGTTGGGGGAAATGTTACCCATTTTCCAAGGGCTGCTCTGCTT
TGGAGTCCAGGGAACCGCTGCTGTCTGGAGCTGTGGAGGGAGGGTTTTTACCCAGCTCCC
ACGATCCCCCTTCTTTTCCACACCCTGGCTTGTGGCTGGAGCCTTACAGGCCTAGTCAGG
GTAGCCTGTGACCTGCGTCTCTTGGTCCCAGGACACTTTTGGAAATTTTGGAAAAATGTGT
TGTTTTTGCATCAGGCCGGCTGTATTTGGTGGCCGGCACACTCTGCCCCCAGCACACATTC
TTCTGTGATTCTAGGCAAAAAGGACAGATGCAGAAGCAGAACGGAGGGAAGGCCGTGGAC
GAGCGGCAGCTGTTCCACGGCACAGCGCCATTTTGTGGACGCCATCTGCCAGCAGAAC
TTTGA CTGGCGGGTCTGTGGTGTTCATGGCACTTCCTACGGCAAGGGGAGCTACTTTGCC
CGAGATGCTGCATATTCCCACCACTACAGCAAATCCGACACGCAGACCCACACGATGTTT
CTGGCCCCGGGTGCTGGTGGGCGAGTTCGTGAGGGGCAATGCCTCCTTTGTCCGTCCGCCG
GCCAAGGAGGGCTGGAGCAACGCCTTCTATGATAGCTGCGTGAACAGTGTGTCCGACCCC
TCCATCTTTGTGATCTTTGAGAAACACCAGGTCTACCCAGAGTATGTCATCCAGTACACC
ACCTCCTCCAAGCCCTCGGTACACCCTCCATCCTGCTGGCCTTGGGCTCCCTGTTACAGC
AGCCGACAGTGAGCGCACAGGAGTGTTCAGGCCTTTACCTGCTCTGCCTTGAAATGGC
TATTTGGGCCTTTCTTTTCTTTTTTAAACAGAACTTTTAAATGAAGTGTCTCTTAACAT
TGACCTCTCAATGAAGTTATGTTCTTAATCTCTTGCTAATAATGATTTTTTACTTTTAAAGT
CACTTTTGGGTTCACTAGTGGATTAACCAGAAGTGATTGTAGTTGAGTCCAGTTTTTGCTT
TTTAATAATGTGTTGAAGTTTTAGTTTTTACTCTTTGTTGACTTTGCTGCTTATTGGCAC
CAGGGACAGAGTTTCTAGATACAATTTTATGGATTGGTTTTTAATTTTATGAGTTTGTCT
CTGCAGTGATTTCGGTTTCTCAGAGTCTCATGGCATCATAGTTTTTCCAGAATGACACAGT
AGCCACCGGTGGATGACAGCCACGGGCGGCACAGTCACTTCTGCCTGTTGCTCTGACAC
CAACCCAGGCAGCTCTGCTGTGGCTTCTCCTGGGCTCTGGCATTAGTTGGTCTGTGTGAC
ATTGTCAGAACAGGTGGCTGCTGTGTGGTGCCATCGAGTCCCTGCTGGTTCCCCCTTGTCC
TGGGAGGGTCACCCATTGCCCAAGGAAGTGCATCCACCTGGCAGGTGACCTGGAGGAGTA
GCTTCCCCGAGGACCCCCAGGCTTGGCCTGTGATTGCGCAAACCCACATTTCTTAAGCAC
ACTGGACACCCTTCGAGTGTGGGTTTTAACATCCCTGTGAGATTGAATACTTGTGCCACA
CATGTACAAAAGAGTATGGAAATAAAAGAAATTTATCCGAAAAAAAAAAAAAAAAAAT
GAGCGGCCGC

FIGURE 6

7/23

Name: IMX 40

CCGGTCTATGGCATTAAACCCTCACTTAACTTTTCAGCCTGCCAGCCTGCCCTATGGATTT
CGGACTTGCCAGCCACACAATTCCTTAAAATAAATCTCTCCGTCTCATAAAAA

FIGURE 7

8/23

Name: IMX 42

CCGGGAGCTGTGAAGGGAACGTGAGGGGGCGGCGTAGTGGAGACCCACGGCAGGCCTGAA
GAAGAGCGGCGGCCGAGCCCGCCTTCCCTGCACCATGCTCATAGAGGATGTGGATGCCCT
CAAGTCCTGGCTGGCCAAGTTACTGGAGCCGATATGTGATGCTGATCCTTCAGCCTTAGC
CAACTATGTTGTAGCACTGGTCAAGAAGGACAAACCTGAGAAAGAATTAAAAGCCTTTTG
TGCTGATCAACTTGATGTCTTTTACAAAAAGAACTTCAGGTTTTGTGGACAAACTATT
TGAAAGTCTCTATACTAAGAACTACCTTCCACTTTTGGAACCAGTAAAGCCTGAGCCAAA
ACCACTAGCCCAAGAAAAA

FIGURE 8

9/23

Name: IMX 44

ATGGATAGTCGCCACACCTTTGCCCTGCTGCGATGACCCTGTCGCCACTTCTGCTGTTCTG
CTGCCACCGCTGCTGCTGCTGCTGGACGTCCCCACGGCGGCGGTGCAGGCGTCCCCTCTG
CAAGCGTTAGACTTCTTTGGGAATGGGCCACCAGTTAACTACAAGACAGGCAATCTATAC
CTGCGGGGGCCCCCTGAAGAAGTCCAATGCACCGCTTGTCATGTGACCCTCTACTATGAA
GCACTGTGCGGTGGCTGCCGAGCCTTCCTGATCCGGGAGCTCTTCCCAACATGGCTGTTG
GTCATGGAGATCCTCAATGTCACGCTGGTGCCCTACGGAAACGCACAGGAACAAAATGTC
AGTGGCAGGTGGGAGTTCAAGTGCCAGCATGGAGAAGAGGAGTGCAAATTCAACAAGGTG
GAGGCCTGCGTGTTGGATGAACTTGACATGGAGCTAGCCTTCCTGACCATTGTCTGCATG
GAAGAGTTTGAGGACATGGAGAGAAGTCTGCCACTATGCCTGCAGCTCTACGCCCCAGGG
CTGTCGCCAGACACTATCATGGAGTGTGCAATGGGGGACCCCGGCATGCAGCTCATGCAC
GCCAACGCCCAGCGGACAGATGCTCTCCAGCCACCACACGAGTATGTGCCCTGGGTCAAC
GTCAATGGGAAACCCTTGGAAGATCAGACCCAGCTCCTTACCCTTGTCTGCCAGTTGTAC
CAGGGCAAGAAGCCGGATGTCTGCCCTTCCTCAACCAGCTCCCTCAGGAGTGTTTGCTTC
AAGTGATGGCCGGTGAGCTGCGGAGAGCTCATGGAAGGCGAGTGGGAACCCGGCTGCCTG
CCTTTTTTTTCTGATCCAGACCCTCGGCACCTGCTACTTACCAACTGGAAAATTTTATGC
ATCCCATGAAGCCCAGATACACAAAATTCCACCCCATGATCAAGAATCCTGCTCCACTAA
GAATGGTGCTAAAGTAAACTAGTTTAATAAGCAAAAAAAAAAAAAAAAAAATTCCTGCG
GCCGC

FIGURE 9

10/23

Name: IMX 56

CCGGGATATCGCCACTGCACTCCAGCCTGGGTGACGGAGCGAGACTCCGTCTCAGAAAAA

FIGURE 10

11/23

Name: IMX4
MHWEEAQISRVLSPRIDLCVSPNKLTYSPK

FIGURE 11

12/23

Name: LMX 10

MEFNTTHYREFGPRGQEFGTROQQQQKKTEHLHITDTQFKKQINITAPSRIFLGSLPSLLT
PDYKQPPPISPDIVLYESSSSQMGLFCPLGTLGSIWRH*

FIGURE 12

13/23

Name: IMX 21

MI VQMTVILKLEMPQDSLILEKSQNWSSQKMDHILICCVCLGDNSEDADEIIQCDNCGIT
VHEGCGVDGESDSIMSSASENSTEPWFCDACKCGVSPSCCLCPNQDGI FKETDAGRWH
IVCALYVPGVAFGDI DKLRPVTLTENMYSKYGAKECSFCEDPRFARTGVCISCDAGMCRA
YFHVTCAQKEGLLSEAAAEEDIADPFFAYCKQHADRDRKWKRNKYLALQSYCKMSLQER
EKQLSPEAQARINARLQQYRAKAELARSTRPQAWVPREKLPRPLTSSASAIRKLMRKAEL
MGISTDIFPVDNSDTSSSV DGRKHKQPALTADFVNYYFERNMRMIQIQENMAEQKNIKD
KLENEQEKLHVEYNKLCESLEELQNLNGKLRSEGQGIWALLGRITGQKLNI PAILRAPKE
RKPSKKEGGTQKTSTLPAVLYSCGICKKNHDQHLLLLCDTCKLHYHLGCLDPPLTRMPRK
TKNSYWQCSECDQAGSSDMEADMAMETLPDGTKRSRROIKEPVKFVPQDVPPEPKKIPIR
NTRTRGRKRSFVPEEEKHEERVPRERRQRQSVLQKKPKAEDLRTECATCKGTGDNENLVR
CDECRLCYHFGCLDPPLKKSPKQTGYGWI CQECDSSSSKEDENEAERKNISQELNMEQKN
PKK

FIGURE 13

14/23

Name: IMX 28

MSKAFGLLRQICQSILAESSQSPADLEEKKEEDSNMKREQPRERPRAWDYPHGLVGLHNI
GOTCCLNSLIQVFVMNVDFTRILKRITVPRGADEQRRSVPFQMLLLEKMQDSRQKAVRP
LELAYCLQKCNVPLFVQHDAQAQLYLKLWNLIKDQITDVHLVERLQALYMIRVKDSLICVD
CAMESSRNSSMLTLPLSLFDVDSKPLKTLEDALHCFFQPRELSSKSKCFCENCCKKTRGK
QVLKLTHLPQTLTIHLMRFSIRNSQTRKICHSLYFPQSLDFSQILPMKRESCDAEEQSGG
QYELFAVIAHVGMADSGHYCVYIRNAVDGKWFCFNDSDNICLVSWEDIQCTYGNPNYHWQE
TAYLLVYMKMEC*

FIGURE 14

15/23

Name: IMX 32

MAAALLPSGQNWHTGFILESNLTNVMKVVRLEIKCPCCLWGHEKIHTESIKNVLNMERPL
SNSDVMKVVF*

FIGURE 15

16/23

Name: IMX 39

MCTLCTVMKSGNGRGEKDGHP LTSSLKIPTASQGSAPCRSKVGVGLGEMLP I FQGLLCFW
SPGNRCCLELWREGFHPAPT I PLLFHTLACGWSLTGLVRVACDLRLLP GHFWNFGKMCC
FASGRLYLVAGTLCPOHTFFCDSRQKGQMQKQNGGKAVDERQLFHGTSAI FVDAICQQNF
DWRVCGVHGTSYGKGSYFARDAAYSHHYSKSDTQHTMFLARVLVGEFVRGNASFVRPPA
KEGWSNAFYDSCVNSVSDPSIFVIFEKHQVYPEYVIQYTTSSKPSVTPSILLALGSLFSS
RQ

FIGURE 16

17/23

Name: IMX 40

MPVYGINPHLTFQPASLPYGFRTCQPHNSLK*

FIGURE 17

18/23

Name: IMX 42

MLIEDVDALKSWLAKLLEPICDADPSALANYVVALVKKDKPEKELKAFCADQLD:FLQKE
TSGFVDKLFESLYTKNYLPLLEPVKPEPKPLAQEK*

FIGURE 18

19/23

Name: IMX 44

(MD) SRHTFAPAAMTLSPLLLFLPPLLLLLDVPTAAVQASPLQALDFFGNGPPVNYKTGN
LYLRGPLKKSNAFLVNVTLYYEALCGGCRAFLIRELFPTWLLVMEILNVTLPYGNAAEQ
NVSGRWEFKCQHGEEECKFNKVEACVLDELDMELAFITIVCMEEFEDMERSLPLCLQLYA
PGLSPDTIMECAMGDPGMQLMHANAQRTDALQPPHEYVPWVTVNGKPLEDQTQLLTLCQ
LYQGKKPDVCPSSSTSSLRVCFK

FIGURE 19

20/23

Name: IMX 56
MPGYRHCTPAWVTERDSVSEK*

FIGURE 20

21/23

Match to cDNA gb|AF019225|AF019225 Homo sapiens apolipoprotein L mRNA, complete cds
Length = 1279
Plus Strand HSPs:

Score = 2078 (311.8 bits), Expect = 6.0e-88, P = 6.0e-88
 Identities = 432/451 (95%), Positives = 432/451 (95%), Strand = Plus / Plus

Query: 168 ATGATGTCACCTTTTCTCTTONTNTNTNONANTNANONXCSAAGGAAAGCTGGAAGCAGAGGATGCA 227
ATGATGTCACCTTTTCTCTTONTNTNTNONANTNANONXCSAAGGAAAGCTGGAAGCAGAGGATGCA
Objct: 1 ATGATGTCACCTTTTCTCTTONTNTNTNONANTNANONXCSAAGGAAAGCTGGAAGCAGAGGATGCA 60

Query: 228 CAAAGCCTTCCLACTGGGACAGATACTGGAGATCTCAAAGTALGCCCTCCGTGA CTGG 287

CAAAGCCTTCCLACTGGGACAGATACTGGAGATCTCAAAGTALGCCCTCCGTGA CTGG

Sbjct: 61 CAAAGCCTTCCLACTGGGACAGATACTGGAGATCTCAAAGTALGCCCTCCGTGA CTGG 120

Query: 288 CTTCTGTCACCACTGGACCCAGAGAGCAGTATCTTTATTGAGGATGCCATTAAATATTTC 347
 CTTCTGTCACCACTGGACCCAGAGAGCAGTATCTTTATTGAGGATGCCATTAAATATTTC
 sbjct: 121 CTTCTGTCACCACTGGACCCAGAGAGCAGTATCTTTATTGAGGATGCCATTAAATATTTC 180

[illegible]

Query: 408 GGAATTCGTGCTGCTGCTGAACTGCCAGGAAATGAGGCGATGAGCTCCGTAAAGCTCTG 467
 GGAATTCGTGCTGCTGCTGAACTGCCAGGAAATGAGGCGATGAGCTCCGTAAAGCTCTG
 Sbjct: 241 GGAATTCGTGCTGCTGCTGAACTGCCAGGAAATGAGGCGATGAGCTCCGTAAAGCTCTG 300

Query: 468 GACAACTTGCAGACAAATGATCATGTAAGACAAAATCTGCACGATAAAGGCCAGCG 527
GACAACTTGCAGACAAATGATCATGTAAGACAAAATCTGCACGATAAAGGCCAGCG
Ebjct: 301 GACAACTTGCAGACAAATGATCATGTAAGACAAAATCTGCACGATAAAGGCCAGCG 360

Query: 528 TACAGAACTGGTTTCTGAAAAGAGTTTCTCGGGTGAAAAGTAGTACGCTTGAGGATAACA 587
TACAGAACTGGTTTCTGAAA GAGTTTCTCGG TGAAAA GTAGCTTGAGGATAACA
361. TACAGAACTGGTTTCTGAAA -GAGTTTCTCGGGTGAAAA -GTAGCTTGAGGATAACA 418

Query: 508 TAAAGAAAGCTTCGATGCCCTTGCAGATGGG 618
 AAGAA GCT CGATGCCCTTGC ATGGG
 Sbjct: 419 CAAAGAGGCT-CCATGCCCTTGGG-GATGGG 447

FIGURE 21

22/23

Match to exons on PAC clone that carries ApoL gene:

>emb|Z82215|HS6802 Homo sapiens DNA sequence from PAC 6802 on chromosome 22.

Contains apolipoprotein L, myosin heavy chain, ESTs, CA repeat, STS

and GSS, complete sequence [Homo sapiens]
Length = 139,389

Match of Query: 2

ACGAGCTGCTCTGGTTATTATACAGACGCATAACTGGAGGTGGGATCCACACAGCTCAGAA 61

|||||
|||||

Sbjct: 21414

AGGACCTGCTCTGGTTATTATACAGACGCATAACTGGAGGTGGGATCCACACAGCTCAGAA 21473

Query: 62 CAGCTGGATCTTGTCTCAGTCTCTGCCAGGGGAAGATTCCCTTGG 104

|||||
Sbjct: 21474 CAGCTGGATCTTGTCTCAGTCTCTGCCAGGGGAAGATTCCCTTGG 21516

Query: 103

GGAGGAGGCCCTGCAGCGACATGGAGGGAGCTGCTTTGCTGAGAGTCTCTGTCTCTGCA 162

GGAGGAGGCCCTGCAGCGACATGGAGGGAGCTGCTTTGCTGAGAGTCTCTGTCTCTGCA

Sbjct: 23232

GGAGGAGGCCCTGCAGCGACATGGAGGGAGCTGCTTTGCTGAGAGTCTCTGTCTCTGCA 23291

Query: 163 TCTGGATGAG 172

TCTGG TGAG

Sbjct: 23292 TCTGG-TGAG 23300

Query: 121 ACATGGAGGGAGCTGCTTTGCTGAGAGTCTCTGTCTCT-
CTGCATCTGGATGAGTGCACTT 179

A ATGG G T CT TG T A TCTC TC T C CA C

GGATGAGTGCACTT

Sbjct: 25333 AGATGGCTGCCCGTCTCTGATTATCTTCTCC-

TCATACCCCAACAGGATGAGTGCACTT 25391

Query: 180 TTCCTTGTNTNTGMAHTHARGHCAGAGGAAGCTGGAGCGAGG 221

TTCCTTG T T G A T A G CAGAGGAAGCTGGAGCGAGG

Sbjct: 25392 TTCCTTGGTGTGGGAGTGAGGGCAGAGGAAGCTGGAGCGAGG 25433

Query: 217

CGAGGGTGCAACAAAACGTTCCAAGTGGGACAGATACTGGAGATCCTCAAAGTAAGCCCC 276

|||||
|||||

Sbjct: 25611

CAAGGGTGCAACAAAACGTTCCAAGTGGGACAGATACTGGAGATCCTCAAAGTAAGCCCC 25670

Query: 277 TCGGTGACTGGGCTGCTGGCACCATGGACCCAGAGAG 313

|||||
Sbjct: 25671 TCGGTGACTGGGCTGCTGGCACCATGGACCCAGGTAG 25707

FIGURE 22

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Query: 304
ACCCAGAGAGCAGTATCTTTATTGAGGATGCCATTAAGTATTTCAAGGAAAAAGTGAGCA 363
|||||
Sbjct: 29886
AACTAGAGAGCAGTATCTTTATTGAGGATGCCATTAAGTATTTCAAGGAAAAAGTGAGCA 29945

Query: 364
CACAGAATCTGCTACTCCTGCTGACTGATAATGAGGCCTGGAACGGATTTCGTGGCTGCTG 423
|||||
Sbjct: 29946
CACAGAATCTGCTACTCCTGCTGACTGATAATGAGGCCTGGAACGGATTTCGTGGCTGCTG 30005

Query: 424 CTGAACTGCCCAGGAATG 441
|||||
Sbjct: 30006 CTGAACTGCCCAGGTAAG 30023

Query: 430
TGCCCAAGGAATGAGGCAGATGAGCTCCGTAAAGCTCTGGACAACCTTGCAAGACAAATGA 489
TG
CAGGAATGAGGCAGATGAGCTCCGTAAAGCTCTGGACAACCTTGCAAGACAAATGA
Sbjct: 33440
TGTGCAGGAATGAGGCAGATGAGCTCCGTAAAGCTCTGGACAACCTTGCAAGACAAATGA 33499

Query: 490
TCATGAAAGACAAAAAAGTGGCAGGATAAAGGCCAGCAGTACAGAACTGGTTTCTGAAA 549
TCATGAAAGACAAAAAAGTGGCAGGATAAAGGCCAGCAGTACAGAACTGGTTTCTGAAA
Sbjct: 33500
TCATGAAAGACAAAAAAGTGGCAGGATAAAGGCCAGCAGTACAGAACTGGTTTCTGAAA- 33558

Query: 550
GAGTTTCCTCGGGTGAAAAAGTAAGCTTGAGGATAACATAAGAAAGCTTCCGTGCCCTTG 609
GAGTTTCCTCGG TGAAAA GT AGCTTGAGGATAACATAAGAA GCT
CCGTGCCCTTG
Sbjct: 33559 GAGTTTCCTCGGTTGAAAA-GTGAGCTTGAGGATAACATAAGAAGGCT-
CCGTGCCCTTG 33616

Query: 610 CAANATGGG 618
CA ATGGG
Sbjct: 33617 CA-GATGGG 33624

FIGURE 22, CONTINUED